

Site: Shiloh Church Road Site

Task: Excavation

Date: 9/6/19

Predicted Predominant Wind Direction: NW

Predicted Maximum Wind Speed: 6 mph



Ludlum 3030 Serial Number:	187982	Cal Due Date:	2/19/2020
Th-230 4π efficiency:	0.3244	Tc-99 4π efficiency:	0.3155
Pu-239 4π efficiency:	0.3996	C-14 4π efficiency:	0.0679
Am-241 4π efficiency:	0.3452	Sr-90 4π efficiency:	0.4264

Notes: AC-5 assigned to the Excavation Team.

Radionuclide Air Sampling
Daily Summary
Shiloh Church Road Site
Halifax County, Virginia

Date: 9/6/19

Predicted Predominant Wind Direction: NW

Public Results

Effluent Limits	Alpha (Ra-226)	9.00E-13	Beta (Pb-210)	6.00E-13
Air Sampler Location	% Of Effluent Concentration Limit	Alpha Result	% Of Effluent Concentration Limit	Beta Result

Worker Results

Derived Air Concentrations	Alpha (Ra-226)	3.00E-10	Beta (Pb-210)	1.00E-10
Tasks Monitored	% Of DAC	Alpha Result	% of DAC	Beta Result
AC-5 - Excavation Team	<0.09%	2.92E-14	<9.65%	-4.44E-12

Comments:

Task: Excavation

Dry Cal Serial: 132112

α isotope of concern			Ra-226	β isotope of concern			Pb-210		
Post Flow Rate (LPM)				4.882					
Stop Date/Time				9/6/19 16:00					
Total Liters				1982.1					
gross α (counts)	net α (cpm)	α MDA (μCi/mL)	α (μCi/mL)	β bkg (counts)	gross β (counts)	net β (cpm)	β MDA (μCi/mL)	β (μCi/mL)	
60	0.04	2.77E-13	2.92E-14	4654	3371	-1.33	9.65E-12	-4.44E-12	
gross α (counts)	net α (cpm)	α MDA (μCi/mL)	α (μCi/mL)	β bkg (counts)	gross β (counts)	net β (cpm)	β MDA (μCi/mL)	β (μCi/mL)	
60	0.04	2.77E-13	2.92E-14	4654	3371	-1.33	9.65E-12	-4.44E-12	
		% DAC:	<0.09%				% DAC:	<9.65%	

Notes: Assigned to Excavation Team.